



Economic Regulation Authority

Draft decision on revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline (2026 to 2030)

Attachment 7: Return on capital, taxation, incentives

7 July 2025

Acknowledgement of Country

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We acknowledge their continuing connection to culture and community, their traditions and stories. We commit to listening, continuously improving our performance and building a brighter future together.

Economic Regulation Authority

Level 4, Albert Facey House

469 Wellington Street, Perth WA 6000

Telephone 08 6557 7900

Email info@erawa.com.au

Website www.erawa.com.au

This document can also be made available in alternative formats on request.

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Note

This attachment forms part of the ERA's draft decision on the proposed revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline. It should be read in conjunction with all other parts of the draft decision, which is comprised of the following document and attachments:

- Draft decision on revisions to the access arrangement for the Dampier to Bunbury Natural Gas Pipeline - Overview, 7 July 2025
 - Attachment 1: Access arrangement and services
 - Attachment 2: Demand
 - Attachment 3: Revenue and tariffs
 - Attachment 4: Regulatory capital base
 - Attachment 5: Operating expenditure
 - Attachment 6: Depreciation
 - Attachment 7: Return on capital, taxation, incentives (this document)
 - Attachment 8: Other access arrangement provisions
 - Attachment 9: Service terms and conditions

Attachment 7. Summary

Rate of return

The rate of return provides service providers with the funding to pay interest on loans and give a return on equity to investors. The rate of return is expressed as a weighted average cost of capital (WACC).

A gas rate of return instrument is required under the National Gas Law.¹ The gas instrument sets out the methods the ERA and service providers must use to estimate the allowed rate of return and the value of imputation credits for gas transmission and distribution service providers.

The rate of return DBP used in its access arrangement proposal for the sixth access arrangement (AA6) is consistent with the gas rate of return instrument.

Changing economic and financial conditions are important factors in determining DBP's cost of capital and the regulatory value of its capital base.

Higher rates of inflation account for 20 per cent of the total increase between the previous fifth access arrangement (AA5) approved revenue and AA6 draft decision revenue. Updated rates of return also account for 29.3 per cent of the total increase in revenue between the AA5 approved revenue and AA6 draft decision revenue.

The rate of return in this draft decision is 7.12 per cent (nominal after-tax) and was updated for current market conditions, with a 20-day averaging period to 30 April 2025. DBP is required to nominate the averaging period to be used for the rate of return for the final decision.

Taxation

A tax building block is included in the annual revenue requirement estimate for each year.

The taxation cost is calculated by multiplying the estimated taxable income by the statutory income tax rate of 30 per cent. The estimated taxation payable is calculated by deducting the value of imputation credits.

DBP's proposed method to calculate AA6 taxation is consistent with the approach used in AA5 and has been accepted by the ERA with updates to reflect the approved input values used in this draft decision.

Incentive mechanism

The regulatory framework provides that a full access arrangement may include incentive mechanisms to encourage efficiency in the provision of services by the service provider. An incentive mechanism may provide for the carrying over of increments for efficiency gains and decrements for efficiency losses from one access arrangement period to the next.

The current AA5 access arrangement contains the Efficiency Factor (E Factor) scheme. DBP has proposed to continue the E Factor scheme for AA6, with some minor amendments to the wording of the scheme. The ERA has accepted these amendments but requires an adjustment to the way in which the E Factor outcomes are disclosed within the access arrangement. To enhance transparency, the E Factor outcomes (increments/decrements)

¹ NGL, section 30D, 30E.

must be shown as a “building block” component for total revenue and the E Factor benchmarks must continue to be disclosed in the access arrangement provisions.

DBP also proposed to add “inspections and other asset management” expenditure as a specific cost exclusion when determining the E Factor benchmarks. The ERA has not approved this exclusion on the basis that these costs are of a routine and recurrent nature and so are largely within DBP’s control. In circumstances where unexpected costs do arise from routine inspections and other asset management activities, and are outside of DBP’s control (for example, additional operating costs to rectify an uncovered fault), these costs may be considered under other provisions of the E Factor that provide for the exclusion of:

- Any operating expenditure not forecast but that meets the criteria for operating expenditure and was incurred for the purpose of reducing capital expenditure.
- Any other operating expenditure amount that the ERA agrees or requires DBP to exclude.

After assessing the application of the E Factor for AA5 and the continuation of the scheme in AA6, the ERA has decided to redraft some clauses to simplify and clarify the provisions of the scheme.

Summary of Required Amendments

Required Amendment 7.1

Subject to the nomination of a final averaging period, DBP must update its rate of return to be consistent with Table 7.8 of Draft Decision Attachment 7.

Required Amendment 7.2

The estimated cost of corporate income tax must be amended in accordance with Table 7.11 of Draft Decision Attachment 7.

Required Amendment 7.3

DBP must apply a negative efficiency carryover of \$37.0 million (real as at 31 December 2024) in AA6 in accordance with the calculations set out in Table 7.12 and Table 7.13 of Draft Decision Attachment 7.

Required Amendment 7.4

DBP must amend section 15 the proposed access arrangement, which details the provisions for the E Factor scheme, to set out the E Factor benchmarks that will apply for AA6.

Required Amendment 7.5

DBP must amend clauses 15.9 and 15.10 of the proposed access arrangement, which detail the exclusions and adjustments that apply to the annual E Factor benchmark, to be consistent with the revised drafting set out in paragraph 135 of Draft Decision Attachment 7.

Required Amendment 7.6

DBP must update the E Factor benchmarks to apply for AA6 to reflect the benchmarks set out in Table 7.14 of Draft Decision Attachment 7. The E Factor benchmarks must be set out in the access arrangement.

Regulatory requirements

1. The *National Gas Access (WA) Act 2009* implements a modified version of the National Gas Law (NGL) and National Gas Rules (NGR) in Western Australia. The rules referenced in this decision are those that apply in Western Australia.²
2. The NGR requires the use of the “building block” approach to determine the total revenue requirement for each year of the access arrangement period.³ The total revenue requirement is the amount that is needed by the service provider to recover the efficient costs incurred in operating the pipeline (that is, the service provider’s cost of service).
3. In addition to a forecast of operating expenditure and depreciation on the projected capital base, other components (building blocks) for determining the service provider’s total revenue requirement include:
 - A return on the projected capital base for the year.
 - The estimated cost of corporate income tax for the year.
 - Increments or decrements for the year that result from the operation of an incentive mechanism.
4. Rule 87 sets out the formula for calculating the return on the projected capital base (RPCB_t) for each year of an access arrangement period as set out below. The allowed rate of return must be calculated in the way stated in the rate of return instrument that is approved by the ERA under a separate process.⁴

$$\text{RPCB}_t = a_t \times v_t$$

where:

a_t is the allowed rate of return for the regulatory year; and

v_t is the value, as at the beginning of the regulatory year, of the projected capital base for the regulatory year (as established under NGR 78 and subject to NGR 82(3)).

5. Rule 87A sets out the formula for calculating the estimated cost of corporate income tax (ETC_t) for each year of an access arrangement period as follows:

$$\text{ETC}_t = (\text{ETI}_t \times r_t) (1 - \gamma)$$

where:

ETI_t is an estimate of the taxable income for that regulatory year that would be earned by a benchmark efficient entity as a result of the provision of reference services if such an entity, rather than the service provider, operated the business of the service provider;

² The current rules that apply in Western Australia are available from the Australian Energy Market Commission: AEMC, ‘National Gas Rules (Western Australia)’ ([online](#)) (accessed July 2025).

³ NGR, rule 76.

⁴ ERA, *2022 final gas rate of return instrument*, 16 December 2022 (Amended 12 September 2023).

r_t is the expected statutory income tax rate for that regulatory year as determined by the ERA; and

y is the allowed imputation credits for the regulatory year.

6. Rule 98 allows the service provider to include (or for the regulator to require the service provider to include) one or more incentive mechanisms to encourage efficiency in the provision of services by the service provider.⁵ The incentive mechanism may provide for the carryover of increments for efficiency gains and decrements for efficiency losses from one access arrangement period to the next.⁶ Where such carryovers exist, the increments or decrements that apply must form part of the “building blocks” to determine the service provider’s total revenue requirement (cost of service).
7. Access Arrangement Information (AAI) is information that is reasonably necessary for users (including prospective users) to understand the background to the access arrangement and the basis and derivation of the various elements of the access arrangement. The NGR require the following cost of service information to be included in the service provider’s AAI:⁷
 - The allowed rate of return for each year of the access arrangement period (rule 72(1)(g)).
 - The estimated cost of corporate income tax calculated in accordance with rule 87A, including the allowed imputation credits referred to in that rule (rule 72(1)(h)).
 - If an incentive mechanism operated for the previous access arrangement period, the proposed carryover of increments for efficiency gains or decrements for efficiency losses in the previous access arrangement period and a demonstration of how allowance is to be made for any such increments or decrements (rule 72(1)(i)).

⁵ Where an incentive mechanism is included in an access arrangement, the service provider must include the rationale for the proposed incentive mechanism in its Access Arrangement Information (NGR, rule 72(1)(l)).

⁶ While an incentive mechanism may provide for the carry-over of increments for efficiency gains and decrements for efficiency losses from one access arrangement period to the next, it must be consistent with the revenue and pricing principles (which are set out in section 24 of the NGL and provide a framework for the construction of reference tariffs).

⁷ NGR, rule 72.

DBP proposal

Rate of return

8. DBP's rate of return and inflation estimates were consistent with the methods detailed in the ERA's gas rate of return instrument.
9. DBP has proposed an average nominal post-tax WACC of 6.93 per cent for AA6, compared with 3.54 per cent approved in AA5.⁸ DBP has estimated inflation of 2.18 per cent for the AA6, compared with 1.15 per cent that was approved in AA5.⁹
10. DBP's proposed WACC and inflation are materially higher than those in AA5 due to changes in market conditions that have increased the cost of finance over the past few years.
11. DBP must nominate an averaging period in advance, which must be close and prior to an access arrangement determination. The nominated averaging period will affect various rate of return parameters that are calculated using market data. DBP used placeholder values for the average of the 20 trading days in September 2024 for its proposed WACC calculation. These placeholders will be replaced with updated values closer to the time of the ERA's final decision.
12. Table 7.1 details the individual rate of return components proposed by DBP for AA6 compared to the existing rate of return components approved in the ERA's final decision for AA5.

Table 7.1: DBP rate of return estimate

Component	AA6 proposed	AA5 approved
Return on debt (%)		
5-year interest rate swap (effective yield)	3.759	0.295
Debt risk premium (10-year average)	1.823	2.259
Debt issuing cost	0.165	0.100
Debt hedging cost	0.123	0.114
<i>Nominal return on debt</i>	<i>5.871</i>	<i>2.768</i>
Return on equity		
Nominal risk free rate (%)	3.96	0.29
Market risk premium (%)	6.1	6.0
Equity beta	0.7	0.7
<i>Nominal return on equity (%)</i>	<i>8.23</i>	<i>4.49</i>

⁸ DBP, *Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public)*, January 2025.

⁹ DBP, *Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public)*, January 2025.

Component	AA6 proposed	AA5 approved
Other parameters		
Debt proportion (%)	55	55
Inflation rate (%)	2.18	1.15
Corporate tax rate (%)	30	30
Franking credits	50	50
Nominal after-tax WACC (%)	6.93	3.54
Real after-tax WACC (%)	4.65	2.37

Source: DBP, Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public).

Taxation

13. DBP has estimated its cost of tax over AA6 to be \$100.0 million (\$ real 2024) using a corporate tax rate of 30 per cent and the formula in rule 87A of the NGR.^{10,11}
14. DBP estimated its annual taxable income (ETI_t) for each year in AA6 by removing the cost of debt financing, operating expenses and tax depreciation from total revenue for each year.
15. DBP has adopted the value of imputation credits (gamma) of 0.5 from the ERA's 2022 gas rate of return instrument. As the instrument is binding on the ERA and DBP, the value of gamma will be 0.5 in the AA6 final decision.
16. DBP's calculation of corporate income tax is set out in Table 7.2.

Table 7.2: DBP calculation of corporate income tax (\$ million)

	2026	2027	2028	2029	2030
Estimated taxable income	196.3	113.2	115.9	153.1	158.2
Tax payable	58.9	34.0	34.8	45.9	47.5
Less value of imputation credits	-29.4	-17.0	-17.4	-23.0	-23.7
Estimate of corporate income tax (\$ nominal 2024)	29.4	17.0	17.4	23.0	23.7
Deflator to \$ real 2024	0.944	0.924	0.904	0.884	0.866
Estimate of corporate income tax (\$ million real 2024)	27.8	15.7	15.7	20.3	20.5

Source: DBP, Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public); DBP, Final Plan 2026-2030, January 2025, p. 116.

¹⁰ DBP, Final Plan 2026-2030, January 2025, p. 113.

¹¹ DBP, Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public), January 2025.

17. DBP's proposed tax asset lives and asset categories for AA6 remain unchanged from AA5 and are set out in Table 7.3.

Table 7.3: DBP proposed tax asset lives (years)

Asset categories	AA6 proposed
Pipeline	20
Compression	20
Metering	15
Other depreciable	10
Computers and motor vehicles	5
Cathodic/corrosion protection	15
SCADA, electrical, control & instrumentation and communications	10
Building	40
Cost of raising equity	5
BEP lease	20

Source: DBP, Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public).

18. DBP has used the roll forward method to roll forward the value from the tax asset base from the closing value in AA5 into AA6. To calculate the tax asset base for AA6, DBP has added forecast capital expenditure and deducted forecast tax depreciation.
19. Table 7.4 sets out DBP's proposed tax asset base over AA5 and its closing AA5 balance to be rolled into AA6. DBP has determined a closing tax asset base value of \$549.7 million to be rolled forward as the opening value for the AA6 tax asset base.

Table 7.4: DBP proposed tax asset base (AA5) (\$ million nominal)

	2021	2022	2023	2024	2025
AA5 opening tax asset base	947.2	876.1	800.4	730.6	640.2
Capital expenditure	39.1	42.1	52.2	39.2	40.4
Tax depreciation	(110.2)	(117.7)	(122.0)	(129.7)	(130.8)
Asset disposal	-	-	-	-	-
Closing value	876.1	800.4	730.6	640.2	549.7

Source: DBP, Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public); DBP, Final Plan 2026-2030, p. 116.

20. Table 7.5 sets out DBP's calculation of the tax asset base for AA6.

Table 7.5: DBP proposed tax asset base (AA6) (\$ million nominal)

	2026	2027	2028	2029	2030
Opening tax asset base	549.7	487.4	451.9	402.8	373.2
Capital expenditure	66.6	81.5	70.3	59.3	46.1
Tax depreciation	(128.9)	(117.0)	(119.4)	(88.9)	(90.7)
Asset disposal	-	-	-	-	-
Closing value	487.4	451.9	402.8	373.2	328.6

Source: DBP, *Final Plan 2026-2030, Attachment 14.1: Tariff Model (Public)*.

Incentive mechanism

21. The ERA approved an operating expenditure efficiency incentive mechanism (the E Factor) for the access arrangement for AA5. The E Factor applies to the operating expenditure that is incurred by DBP to deliver its pipeline services. The intent of the scheme is to provide DBP with a continuous incentive to achieve efficiency gains throughout the access arrangement period. It works by establishing an operating expenditure benchmark, which DBP is incentivised to outperform across all years of the access arrangement period.
22. Applying the E Factor for AA5, DBP has calculated a negative efficiency carryover of \$21.4 million in AA6. That is, DBP has made incremental efficiency losses since 2023 which outweigh the efficiency gains from 2021 and 2022 that are still carried over in AA6. Details of this calculation is provided in supporting information.¹²
23. DBP has proposed to keep the E Factor for AA6, with some amendments to the E Factor provisions in section 15 of the proposed access arrangement. These amendments include:
 - Some basic drafting amendments to reflect defined terms used in the access arrangement.
 - The removal of redundant and/or ambiguous provisions (AA5 clauses 15.4 and 15.5), including the clause that set outs the E Factor benchmarks to apply for the access arrangement period (AA5 clause 15.13).
 - The addition of "inspections and other asset management" expenditure as a cost that may be excluded from the E Factor when determining the annual E Factor benchmarks (new AA6 clause 15.9(b)(i)C).
24. DBP submitted that the nature of inspections and other asset management expenditure is generally non-recurrent and can be dependent on factors outside of DBP's control of efficiency (such as asset condition, throughput and climatic factors). Furthermore, when unforeseen events occur (such as more defects being identified in pipeline), the need for more expenditure might be required to ensure the integrity of the pipeline.¹³ It

¹² DBP, *Final Plan 2026-2030, Attachment 12.1: E-Factor Calculation Model*, January 2025.

¹³ DBP, *Final Plan 2026-2030*, January 2025, p. 120.

is for these reasons that DBP has proposed to exclude this expenditure from the E Factor.

25. Table 7.6 sets out DBP's proposed E Factor exclusions and resulting benchmarks for AA6.

Table 7.6: DBP proposed E Factor benchmarks for AA6
(\$ million real 2024, including labour cost escalation)

Operating expenditure category	2026	2027	2028	2029	2030
Total forecast opex	124.5	134.4	131.1	128.0	134.4
<i>Less excluded cost categories:</i>					
System use gas	23.1	22.0	22.3	22.5	26.7
GEA/turbine overhauls	4.9	8.8	4.5	6.9	7.8
Inspections & other asset management	4.8	10.4	10.4	3.6	3.7
E Factor benchmark	91.7	93.1	93.9	95.1	96.3

Source: DBP, Final Plan 2026-2030, Attachment 8.1: Opex Forecast Model (Public), January 2025.

Submissions

Rate of return

26. Three submissions in response to the ERA's issues paper commented on the rate of return.
27. Alinta Energy noted that DBP's rate of return calculation appeared consistent with the guideline and other recent access arrangement decisions.¹⁴
28. Horizon Power:¹⁵
 - Noted that changing economic and financial conditions, which contributed to a higher WACC, were outside the control of both DBP and the ERA.
 - Requested the ERA to ensure DBP's proposed AA6 capital spend, forecasts and assumptions were necessary, justified and reasonable.
29. NewGen Power Kwinana (NewGen) noted that DBP's proposed price increase for AA6 compared to AA5 was due to a higher WACC.¹⁶

Taxation

30. None of the submissions received commented on taxation.

Incentive mechanism

31. NewGen did not agree with DBP's proposal to exclude the inspections and other asset management expenditure category from the E Factor scheme on the basis that it did not accept DBP's argument that this expenditure is generally non-recurrent and outside DBP's control. NewGen stated that "while external events may have some influence on this category of expenditure, inspections and asset management are fundamental pipeline owner responsibilities over which DBP can exert significant control".¹⁷

¹⁴ Alinta Energy, *Submission in response to DBP proposal and/or ERA issues paper*, 1 April 2025, p. 2.

¹⁵ Horizon Power, *Submission in response to DBP proposal and/or ERA issues paper*, 26 March 2025, p. 2.

¹⁶ NewGen Power, *Submission in response to DBP proposal and/or ERA issues paper*, 31 March 2025, p. 3.

¹⁷ NewGen Power, *Submission in response to DBP proposal and/or ERA issues paper*, 31 March 2025, p. 12.

Draft decision

Return on projected capital base

32. The ERA published its gas rate of return instrument on 16 December 2022.¹⁸ On 12 September 2023, we amended the instrument due to the cessation of the Reserve Bank of Australia's (RBA) F16 statistical table.¹⁹ The amended instrument applies to this current review.²⁰
33. DBP has used the instrument for its proposal. This draft decision is consistent with the gas rate of return instrument.
34. The following sections detail the ERA's consideration of each of the rate of return parameters and the ERA's draft decision on the rate of return for AA6.

Gearing

35. Gearing is the proportion of a business' assets financed by debt and equity. Gearing is defined as the ratio of the value of debt to total capital (that is, the sum of debt and equity) and is generally expressed as follows:

$$\text{Gearing} = \frac{\text{Debt}}{\text{Debt} + \text{Equity}}$$

Equation 1

36. The ERA uses the gearing ratio to weight the costs of debt and equity when the WACC is determined.
37. Consistent with the gas rate of return instrument, the ERA has applied a gearing of 55 per cent in this draft decision.

Return on debt

38. Consistent with the gas rate of return instrument, the ERA maintains the hybrid trailing average approach to estimate the return on debt. Under the hybrid trailing average approach for estimating the return on debt:
 - The benchmark entity enters into the assumed benchmark efficient debt strategy, assumed to be a portfolio of 10-year fixed-rate debt with 10 per cent refinanced each year (the same debt portfolio as the full trailing average approach).
 - The benchmark entity uses derivative arrangements to adjust rates from the efficient debt portfolio to lock in five-year interest rate swaps rates, set on the day at the start of the regulatory period.
 - The 10-year trailing average debt risk premium is updated annually.

¹⁸ ERA, *Notice – 2022 gas rate of return instrument review: Publication of final gas instrument and explanatory statement*, 16 December 2022 ([online](#)) (accessed July 2025).

¹⁹ ERA, *2022 final gas rate of return instrument*, 16 December 2022 (Amended 12 September 2023), p. 16 and p. 22.

²⁰ It should be noted that the RBA table is now available again. The instrument accommodates this circumstance and utilises RBA data in the first instance.

39. The estimate of the return on debt under the hybrid trailing average approach comprises a risk premium above the risk free rate, plus an additional margin for administrative and hedging costs:

$$\text{Return on debt} = \text{Risk free rate} + \text{Debt risk premium} + \text{Debt raising costs} + \text{Hedging costs}$$

Equation 2

40. The individual debt components are further discussed below.

Debt risk free rate

41. The risk free rate is the return an investor would expect when investing in an asset with no risk. The risk free rate is the rate of return an investor receives from holding an asset with a guaranteed payment stream (that is, where there is no risk of default). Since there is no likelihood of default, the return on risk free assets compensates investors for the time value of money.
42. Consistent with the hybrid trailing average approach, the ERA has used the interest rate swap rate at the start of a regulatory access arrangement period. The estimate is fixed for the duration of the access arrangement period.
43. The ERA has used the 20-day averaging period to 30 April 2025 as a placeholder for this draft decision. This update allows the draft decision to reflect more current financial market conditions, compared to DBP's initial proposal. The final decision will be updated for DBP's nominated final averaging period. This updated rate will be fixed for the duration of AA6.
44. For this draft decision the ERA estimates a risk free rate for the return on debt of 3.776 per cent for the 20-day averaging period to 30 April 2025.

Term of debt

45. To estimate a return on debt, a regulator needs to set a benchmark term for debt.
46. Consistent with the gas rate of return instrument, the ERA has determined a 10-year term for debt that aligns with the recent Australian regulatory practices.
47. For this draft decision, the ERA applies a benchmark efficient debt strategy as a portfolio of 10-year fixed-rate debt with 10 per cent refinanced each year to determine the return on debt.

Benchmark credit rating

48. The benchmark credit rating is an input required to estimate the debt risk premium. The credit rating is defined as the forward-looking opinion provided by a ratings agency of an entity's credit risk. Credit ratings provide a broad classification of a firm's probability of defaulting on its debt obligations. Therefore, credit ratings represent the risk present in holding a debt instrument.
49. Consistent with the gas rate of return instrument, the ERA applies a benchmark credit rating of BBB+ to determine the return on debt.

Debt risk premium

50. The debt risk premium is the return above the risk free rate that lenders require to compensate them for the risk of providing debt funding to a benchmark business. The debt risk premium compensates holders of debt securities for the possibility of default by the issuer.
51. Consistent with the gas rate of return instrument, the ERA uses a 10-year term to estimate the debt risk premium.
52. The ERA considers the revised bond yield approach should be used to determine the debt risk premium. Estimating the debt risk premium under this approach involves the following steps, which determines the debt risk premium at a point in time, being the date of calculation.
 - **Step 1:** Determining the benchmark sample: Identifying a sample of relevant domestic and international corporate bonds that reflect the credit rating of the benchmark efficient entity.
 - **Step 2:** Collecting data and converting yields to Australian dollar equivalents: Converting the bond yields from the sample into hedged Australian dollar equivalent yields inclusive of Australian swap rates.
 - **Step 3:** Averaging yields over the averaging period: Calculating an average AUD equivalent bond yield for each bond across the averaging period.
 - **Step 4:** Estimating curves: Estimating yield curves on this data by applying the Gaussian Kernel, Nelson-Siegel and Nelson-Siegel-Svensson techniques.
 - **Step 5:** Estimating the cost of debt: Calculating the simple average of the three yield curves' 10-year costs of debt to arrive at a market estimate of the 10-year cost of debt.
 - **Step 6:** Calculating the debt risk premium: Calculating the debt risk premium by subtracting the 10-year interest rate swap rate from the 10-year cost of debt.
53. The ERA publishes debt risk premium process documents and accompanying tools for stakeholders on the revised bond yield approach. These documents and tools provide technical steps and details necessary for stakeholders to estimate the debt risk premium.²¹
54. To determine the debt risk premium that should be used to calculate the return on debt, the ERA constructed a 10-year trailing average debt risk premium. This consists of a debt risk premium for the current year and a debt risk premium for each of the nine prior years. The debt risk premium is then calculated for each year in the 10-year term, to work out an average value to be applied to AA6.
55. Table 7.7 details the ERA's estimated trailing average debt risk premium for this draft decision. The historical annual debt risk premium estimates that applied in AA5 are unchanged for AA6.

²¹ Technical documents and tools to estimate the ERA's revised bond yield approach can be found on the [ERA website](#).

Table 7.7: ERA draft decision estimated trailing average debt risk premium for AA6

Year	Debt risk premium (%)
2017	2.274
2018	1.756
2019	1.712
2020	1.995
2021	1.712
2022	1.568
2023	2.228
2024	1.913
2025	1.606
2026	1.833*
Trailing average debt risk premium	1.860

*The debt risk premium estimate, for 20-day averaging period to 30 April 2025, is a placeholder only.

Source: ERA analysis.

56. For this draft decision, the ERA has calculated a debt risk premium of 1.833 per cent for 2026 (the first year of AA6) as a placeholder only, based on the 20-day averaging period to 30 April 2025. This rate is an indicative value and will be updated in the final decision for an appropriate final averaging period closer to the date of the final decision. The debt risk premia for 2027 to 2030 will be updated annually through the tariff variation mechanism.

Debt raising and hedging costs

57. Debt raising and hedging costs are the administrative costs and other charges incurred by businesses when obtaining and hedging debt financing. Historically, the ERA has allowed these costs to be included as part of the return on debt.
58. Consistent with the gas rate of return instrument, the ERA maintains that debt raising costs should be based on direct costs associated with established regulatory practices and that debt raising costs of 0.165 per cent per annum are appropriate.
59. In the gas rate of return instrument, the ERA has applied an allowance of 0.123 per cent per annum for debt hedging costs.

Return on equity

60. The return on equity is the return that investors require from a firm to compensate them for the risk they take by investing their capital.
61. There are no readily observable proxies for the expected return on equity. While estimates of the cost of debt can be obtained by observing debt instruments, financial

markets do not provide a directly observable proxy for the cost of equity, for either individual firms or for the market.

62. Estimating a forward-looking return on equity, sufficient to enable regulated firms to recoup their prevailing equity financing costs, requires the use of models. The model most used by Australian regulators for quantifying the return on equity has been the Sharpe-Lintner Capital Asset Pricing Model (CAPM).
63. The ERA determines a single point estimate for the return on equity using the Sharpe-Lintner CAPM by applying the following formula:

$$R_i = R_f + \beta_i(R_M - R_f)$$

Equation 3

where:

R_i is the required rate of return on equity for the asset, firm or industry in question

R_f is the risk free rate

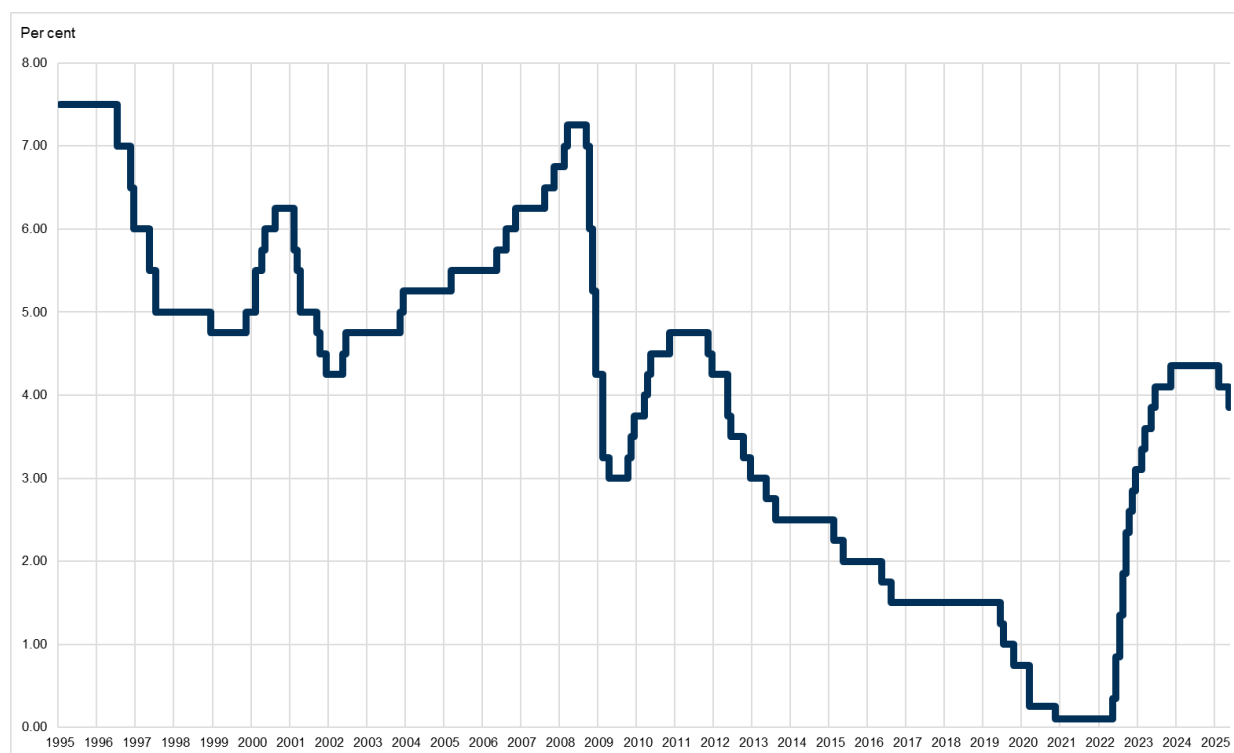
β_i is the equity beta that describes how a particular portfolio i will follow the market which is defined as $\beta_i = cov(R_i, R_M) / var(R_M)$

$(R_M - R_f)$ is the market risk premium.

64. The individual equity components are further discussed below.

Equity risk free rate

65. The risk free rate is the return an investor would expect when investing in an asset with no risk.
66. Consistent with the gas rate of return instrument, the ERA considers that 10 years is the most appropriate term for the equity risk free rate and considers observed yields from Commonwealth Government Security bonds are the best proxy for risk free assets in Australia.
67. Economic and financial conditions have changed significantly since the ERA's AA5 final decision in April 2021. Although the risk free rate had been volatile and uncertain between 2019 and 2023, it appears to have returned to long-term levels.
68. Inflation in Australia increased to 6.6 per cent in 2022 and the rate of inflation has gradually been declining in response to the Reserve Bank Australia's (RBA) tightening of monetary policy to meet the inflation target band of two to three per cent. However, the rate of decline has been slower than anticipated due to more persistent supply side inflationary factors. Other shocks such as the conflicts in Ukraine and the Middle East, global supply shortages and the more recent trade war have added to uncertainty of the inflationary environment.
69. The RBA progressively increased the cash rate between May 2022 and November 2023. The cash rate was held flat throughout 2024 at 4.35 per cent. On 18 February 2025, the RBA reduced the cash rate by 25 basis points to 4.10 per cent. On 20 May 2025, the RBA further reduced the rate by 25 basis points to 3.85 per cent. These monetary policy changes are illustrated in Figure 7.1.

Figure 7.1: Reserve Bank of Australia cash rate target (1995 to 2025)

Source: ERA analysis based on Reserve Bank of Australia F1 statistical tables.

70. The ERA has determined the risk free rate for equity by:

- Using observed yields from 10-year Commonwealth Government Security bonds.
- Using linear interpolation of observed yields of Commonwealth Government Security bonds.

71. For this draft decision the ERA estimates a risk free rate for the cost of equity of 4.32 per cent for the 20-day averaging period to 30 April 2025.

72. For the final decision the ERA will use an averaging period nominated by DBP to determine the yield and set the risk free rate for equity at the start of AA6. This rate will be fixed for the duration of AA6.

Market risk premium

73. The market risk premium is a parameter of the Sharpe-Lintner CAPM, and is the expected rate of return in excess of the risk free rate that investors require to invest in a fully-diversified portfolio. *Ex-ante*, investors always require a rate of return above the risk free rate to invest in a risky asset, therefore the expected market risk premium is always positive. *Ex-post*, the realised return to the market portfolio may be negative. To establish the cost of capital, the *ex-ante* market premium is relevant.

74. The market risk premium compensates an investor for the systematic risk of investing in a fully diversified portfolio. Systematic risk is risk that cannot be diversified away by investors because it affects all firms in the market. This is a forward-looking concept.

75. For this draft decision, the ERA has applied a market risk premium of 6.1 per cent consistent with the gas rate of return instrument to determine the rate of return.

Equity beta

76. The equity beta is a parameter that measures the systematic risk of a security or a portfolio in comparison to the market as a whole.
77. Equity beta is the slope parameter β_i in the Sharpe-Lintner CAPM. The slope parameter β_i correlates a specific asset's return in excess of the risk free rate of return, to movements in the return on the market portfolio.
78. For this draft decision, the ERA has applied an equity beta of 0.7 consistent with the gas rate of return instrument to determine the rate of return.

Inflation

79. Inflation is the rate of change in the general level of prices of goods and services.
80. Forecast inflation can be used to translate the nominal post-tax WACC to a real post-tax WACC.
81. Consistent with the gas rate of return instrument, the ERA will estimate the expected inflation rate using the Treasury bond implied inflation approach. This approach uses the Fisher equation and the observed yield of:²²
 - Five-year Commonwealth Government Securities, which reflect a market-based estimate of the nominal risk free rate.
 - Five-year Treasury indexed bonds, which reflect a market-based estimate of the real risk free rate.
82. The Treasury bond implied inflation approach uses linear interpolation to derive the daily point estimates of both the nominal five-year risk free rate and the real five-year risk free rate, using the Fisher equation.
83. The ERA considers that the term of expected inflation should be five years, consistent with the length of the access arrangement period as it offers the best estimate of what inflation is expected to be over the access arrangement period.
84. The revenue model takes the best estimate of the five-year inflation forecast out (of the nominal WACC) and puts back in the actual inflation over the five-year access arrangement period (through the indexation of the regulatory asset base).
85. For this draft decision, the ERA has used a 20-day averaging period to 30 April 2025 to determine a forecast inflation rate of 1.90 per cent to estimate the rate of return.

Value of imputation credits (gamma)

86. The imputation tax system prevents corporate profits from being taxed twice. Under the Australian imputation tax system, franking credits are distributed to investors at the time that dividends are paid and provide an offset to those investors' taxation liabilities.
87. The gamma parameter accounts for the reduction in the effective corporate taxation that is generated by the distribution of franking credits to investors. Generally, investors who can use franking credits will accept a lower required rate of return, before personal

²² The formal Fisher equation is: $1 + i = (1 + r)(1 + \pi^e)$ where: i is the nominal interest rate, r is the real interest rate and π^e is the expected inflation rate.

tax, on an investment that has franking credits, compared with an investment that has similar risk and no franking credits.

88. Consistent with the gas rate of return instrument, for this draft decision the ERA has applied a gamma of 0.5 to determine the rate of return, which will be fixed for AA6.
89. The ERA has also updated the distribution rate from 0.7 to 0.9 in the tariff model to align with the gas rate of return instrument.

Draft decision on rate of return

Changes in economic and financial conditions

90. The ERA notes the comments made by Alinta Energy, NewGen and Horizon Power in their respective submissions that:
 - DBP's rate of return calculation appeared consistent with the gas rate of return instrument and other recent access arrangement decisions (Alinta Energy).
 - Changes in market-based WACC parameters have contributed to the increase in DBP's proposed reference tariffs (NewGen).
 - Changing economic and financial conditions are outside the control of both DBP and the ERA (Horizon Power).
91. The ERA's gas rate of return instrument is binding for gas networks. As a binding instrument, the gas rate of return instrument uses market information to estimate the prevailing returns that compensate investors for holding assets with a similar risk of return as the regulated asset.
92. Changing economic and financial conditions are important factors in determining DBP's cost of capital and inflation of the capital base and drive a large increase in the proposed revenue and tariff.

Indicative rate of return for AA6

93. Based on the gas rate of return instrument and the above assessments, the ERA has calculated the rate of return in Table 7.8. For the draft decision the ERA determines:
 - The nominal after tax cost of equity as 8.590 per cent.
 - The nominal cost of debt as 5.924 per cent.
 - The nominal after tax rate of return as 7.12 per cent.
94. For this draft decision the ERA used 20-days to 30 April 2025 as a placeholder to estimate the rate of return.
95. The rate of return for the final decision will be updated based on an agreed averaging period nominated by DBP following the draft decision.

Table 7.8: ERA draft decision rate of return for AA6

Component	DBP proposed	ERA draft decision
Return on debt (%)		
5-year interest rate swap (effective yield)	3.759	3.776
Debt risk premium (10 year average)	1.823	1.860
Debt issuing cost	0.165	0.165
Debt hedging cost	0.123	0.123
<i>Nominal return on debt</i>	<i>5.871</i>	<i>5.924</i>
Return on equity		
Nominal risk free rate (%)	3.96	4.32
Market risk premium (%)	6.1	6.1
Equity beta	0.7	0.7
<i>Nominal return on equity (%)</i>	<i>8.23</i>	<i>8.59</i>
Other parameters		
Debt proportion (%)	55	55
Inflation rate (%)	2.18	1.90
Corporate tax rate (%)	30	30
Franking credits	0.5	0.5
Nominal after-tax WACC (%)	6.93	7.12
Real after-tax WACC (%)	4.65	5.13

Required Amendment 7.1

Subject to the nomination of a final averaging period, DBP must update its rate of return to be consistent with Table 7.8 of Draft Decision Attachment 7.

Taxation

96. The ERA has assessed DBP's amended estimated cost of corporate income tax for each regulatory year in AA6 against the requirements in rule 87A of the NGR.
97. The ERA accepts the values that DBP has used for:
 - The expected statutory income tax rate for each regulatory year in AA6 of 30 per cent. This value is consistent with current expectations for the statutory company tax rate over the access arrangement period.

- Allowed imputation credits (gamma) of 0.5 in accordance with the gas rate of return instrument.
98. A tax building block is included in the annual revenue requirement estimate for each year.
99. The taxation cost is calculated by multiplying the estimated taxable income by the statutory income tax rate of 30 per cent. The estimated taxation payable is calculated by deducting the value of imputation credits.

Tax asset lives

100. The ERA has reviewed DBP's proposed tax asset lives, as detailed in Table 7.3 (above). DBP proposes the same tax asset lives for new capital expenditure in AA6.
101. The ERA accepts maintaining the existing tax asset lives for capital assets over AA6 as they are still consistent with Australian Taxation Office schedules.

Tax asset base

102. The ERA has reviewed DBP's assumptions and calculations and is satisfied that the calculations have been carried out consistently with the method and tax asset lives approved in AA5.
103. The ERA notes that DBP continues to apply the diminishing value method to calculate tax depreciation of assets purchased from 1 January 2021 onwards in accordance with the AA5 final decision.
104. The ERA accepts that DBP used the roll forward method to establish the opening value of the tax asset base for each regulatory year in AA6:
- The opening tax asset base for the first regulatory year in AA6 (2026) was calculated by rolling forward the closing value of the actual tax asset base for AA5.
 - The ERA calculated the closing value of the tax asset base for each regulatory year in AA5 using the method that was determined in the final decision for AA5.
105. The tax asset base calculated by the ERA for each regulatory year in AA5 is set out in Table 7.9.

Table 7.9: ERA draft decision actual tax asset base for AA5 (\$ million nominal)

	2021	2022	2023	2024	2025
Opening tax asset base	945.0	868.3	793.4	717.8	631.5
Capital expenditure	33.3	40.4	44.3	38.7	37.6
Asset disposals	0.0	0.0	0.0	0.0	0.0
Tax depreciation	110.0	115.3	119.9	125.0	127.7
Closing value	868.3	793.4	717.8	631.5	541.4

Source: ERA analysis.

106. The ERA calculates the closing value for the forecast tax asset base for each regulatory year in AA6 using the following method:

Opening value (equal to the closing value for the previous regulatory year),

plus: forecast expenditure (net of capital contributions) incurred in the regulatory year;

less: depreciation based on forecast capital expenditure incurred in using the diminishing value method for assets purchased on or after 1 January 2021;

less: forecast asset disposals during AA6.

107. The forecast tax asset base calculated by the ERA in this draft decision for each regulatory year in AA6 is set out in Table 7.10.

Table 7.10: ERA draft decision forecast tax asset base for AA6 (\$ million nominal)

	2026	2027	2028	2029	2030
Opening tax asset base	541.4	465.1	409.0	344.6	313.3
Capital expenditure	50.6	56.3	49.0	51.0	36.6
Asset disposals	0.0	0.0	0.0	0.0	0.0
Tax depreciation	126.9	112.4	113.4	82.3	83.5
Closing value	465.1	409.0	344.6	313.3	266.4

Source: ERA analysis.

Estimated cost of corporate income tax

108. The ERA has estimated the cost of corporate income tax based on its considerations above. The annual estimates for the cost of corporate income tax are based on unsmoothed building block revenue. The estimated cost of corporate income tax will be recalculated in each year of AA6 as part of the tariff variation process. This includes the change to reflect the annually updated debt risk premium.
109. The ERA's draft decision calculation of the estimated cost of corporate income tax (net of imputation credits) for each regulatory year in AA6 is set out in Table 7.11.

Table 7.11: ERA draft decision calculation of the estimated cost of corporate income tax for AA6 (\$ million nominal)

	2026	2027	2028	2029	2030
Unsmoothed revenue	466.2	486.4	488.8	490.7	498.4
Tax expenses					
Operating expenditure	(109.8)	(117.3)	(117.4)	(113.7)	(118.6)
Debt servicing cost	(113.7)	(112.4)	(110.9)	(109.0)	(107.0)
Tax depreciation	(126.9)	(112.4)	(113.4)	(82.3)	(83.5)
Total tax expenses	(350.5)	(342.2)	(341.7)	(305.0)	(309.2)
Tax					
Estimated taxable income	115.8	144.3	147.1	185.7	189.3
Carried forward tax loss	0.0	0.0	0.0	0.0	0.0
Estimated taxable income (net of tax loss)	115.8	144.3	147.1	185.7	189.3
Estimated cost of corporate income tax	(33.2)	(41.5)	(42.7)	(53.4)	(54.2)
Value of imputation credits	16.6	20.8	21.3	26.7	27.1
Estimated cost of corporate income tax	(16.6)	(20.8)	(21.3)	(26.7)	(27.1)

Source: ERA analysis.

Required Amendment 7.2

The estimated cost of corporate income tax must be amended in accordance with Table 7.11 of Draft Decision Attachment 7.

Incentive mechanism

110. Rule 98 of the NGR allows the ERA to approve, or require, the inclusion of an incentive mechanism in the access arrangement to encourage efficiency in the provision of pipeline services by the service provider. An incentive mechanism may provide for the carryover of increments for efficiency gains and decrements for efficiency losses from one access arrangement period to the next; and must be consistent with the revenue and pricing principles.²³
111. Increments or decrements resulting from the operation of an incentive mechanism are included as a “building block” component in the determination of total revenue under rule 76(d) of the NGR.²⁴

²³ Revenue and pricing principles as set out in section 24(3) of the NGL.

²⁴ The ERA’s determination of total revenue is set out in Draft Decision Attachment 3.

Application of E Factor for AA5

112. DBP introduced the E Factor scheme as an operating cost efficiency incentive mechanism in AA5. Applying the E Factor for AA5, DBP has calculated a negative efficiency carryover of \$21.4 million in AA6 (Figure 7.2). While DBP's E Factor calculation returns a benefit of \$21.4 million to users (the negative efficiency carryover amount), the ERA notes that DBP was still provided with a benefit of \$25.4 million during AA5 (the total cumulative savings). In any case, the ERA is not satisfied that DBP's E Factor calculation (as set out in Attachment 12.1 to DBP's Final Plan), is in accordance with the provisions of the E Factor scheme that apply for AA5 for the reasons set out below.

Figure 7.2: DBP E Factor carryover calculation for AA6

\$million (Dec2024)	AA5 period					AA6 period					Total
Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	
Opex benchmark (A)	73.3	73.4	73.5	73.5	73.6						
Opex actual (B)	65.3	62.8	68.0	72.8	72.9						
Cumulative saving (C = A - B)	8.0	10.6	5.5	0.7	0.7						
Incremental saving (C_n - C_{n-1})	8.0	2.6	-5.1	-4.8	0.0						
Carryover of incremental gain/loss made in year:											
Year 1		8.0	8.0	8.0	8.0	8.0					
Year 2			2.6	2.6	2.6	2.6	2.6				
Year 3				-5.1	-5.1	-5.1	-5.1	-5.1			
Year 4					-4.8	-4.8	-4.8	-4.8	-4.8		
Year 5						-0.0	-0.0	-0.0	-0.0	-0.0	
Total Carryover:						0.7	-7.4	-9.9	-4.8	0.0	-21.4
Benefits to business (30% based on sum in NPV terms)											
(Cumulative saving + carryover)	8.0	10.6	5.5	0.7	0.7	0.7	-7.4	-9.9	-4.8	0.0	+0 p.a. to year 30
Benefits to customers (70% based on sum in NPV terms)											
(Cumulative saving + carryover 6 years deferred)						0.0	8.0	10.6	5.5	0.7	+0.7 p.a. to year 30

Source: DBP, Final Plan 2026-2030, January 2025, p. 121.

E Factor calculation

113. Clauses 15.11 and 15.12 of the AA5 access arrangement set out the calculation of the E Factor benchmark for each year of the access arrangement period:

- 15.11 The annual E Factor benchmark is the total annual operating expenditure forecast approved by the ERA, less the following E Factor exclusions:
- movement in provisions;
 - any operating expenditure sub-category not forecast using a top-down, revealed cost approach. These costs:
 - may include, but are not limited to, operating costs incurred by the Operator relating to:
 - system use gas; and
 - non-recurrent operating expenditure.

- (ii) must not include operating expenditure previously classified as capital expenditure that was forecast on a bottom-up basis.
 - (c) any operating expenditure amount not included in the ERA approved operating expenditure forecast, but that meets the requirements of Rule 91(1) and was incurred for the purpose of reducing capital expenditure;
 - (d) the Operator will adjust the E Factor benchmark to include the forecast operating expenditure arising from the cost pass through event or ERA approved expenditure arising from cost pass through events which apply in respect of that year; and
 - (e) any other operating expenditure amount that the ERA agrees or requires the Operator to exclude from the E Factor benchmark.
 - 15.12 Where the Operator changes its approach to classifying costs as either capital expenditure or operating expenditure during the access arrangement period, the Operator will adjust the E Factor benchmark to be consistent with the capitalisation policy changes to the effect that outcomes under the efficiency mechanism are not affected by the change in capitalisation policy.
114. To calculate the E Factor benchmarks and actual/estimated operating expenditure for AA5, DBP has applied the following “excludable costs” (E Factor exclusions):²⁵
- [cell B15] Opex allowance application to E Factor (E Factor benchmark)**
- ...
- [cell B21] Fuel gas (AA5 clause 15.11(b)(i))
 - [cell B22] Turbine / GEA overhauls (AA5 clause 15.11 (b)(ii))
 - [cell B23] Inspections and other asset management (AA5 clauses 15.11(b)(i)(B))
 - [cell B24] Reclassified capex to opex (AA clause 15.12) - labour cost rate update
- [cell B28] Actual and estimated opex applicable to E Factor**
- ...
- [cell B34] Fuel gas (AA5 clause 15.11 (b)(i))
 - [cell B35] Turbine / GEA overhauls (AA clause 15.11 (b)(ii))
 - [cell B36] Inspections and other asset management (AA5 clauses 15.11(b)(i)(B))
 - [cell B37] Movement in provisions (AA5 clause 15.11 (a))
 - [cell B38] Reclassified capex to opex (AA5 clause 15.12) - labour cost rate update
115. Clause 15.11(b) of the AA5 access arrangement explicitly allows for the exclusion of any operating expenditure subcategory *not* forecast using a top-down, revealed cost approach (top-down, roll-forward method); meaning that the expenditure must have been forecast using a bottom-up approach. The exception to this is any operating expenditure previously classified as capital expenditure that was forecast on a bottom-up basis (as set out in subclause 15.11(b)(ii)).
116. The only forecast operating expenditure categories that the ERA approved for AA5 using a bottom-up approach included: system use gas (SUG); GEA/turbine overhauls;

²⁵ DBP, *Final Plan 2026-2030, Attachment 12.1: E-Factor Calculation Model*, January 2025.

and capital expenditure to operating expenditure.²⁶ The ERA therefore considers that the inspections and other asset management expenditure category, which DBP has excluded, cannot be excluded.

117. The ERA notes that clause 15.11(e) provides for the exclusion of “any other operating expenditure amount that the ERA agrees or requires [DBP] to exclude from the E Factor benchmark”. However, during the AA5 review, the ERA did not agree to the exclusion of inspections and other asset management costs. The ERA has also not approved DBP’s proposal to list these costs as a specific cost exclusion for AA6 (paragraph 129).
118. Additionally, DBP has used clause 15.11(a) to exclude expenditure resulting from movement in provisions from the calculation of actual operating expenditure applicable to the E Factor.²⁷ DBP has not applied the exclusion to the E Factor benchmark; that is, the exclusion for movement in provisions has not been applied to the benchmark (to exclude it from the operating expenditure allowance) as per the provisions of clause 15.11, which states:

The annual E Factor benchmark is the total annual operating expenditure forecast approved by the ERA, less the following E Factor exclusions:

- (a) Movement in provisions; ...

119. DBP has also adjusted the actual operating expenditure applicable to the E Factor in 2024 to exclude costs resulting from the reclassification of capital expenditure to operating expenditure (\$8.5 million for labour cost rate update). In circumstances where DBP changes its approach to classifying costs as either capital or operating expenditure during the access arrangement period, clause 15.12 requires DBP to adjust the E Factor benchmark to ensure it is consistent with any capitalisation policy changes, so that outcomes under the efficiency scheme are not affected by the change in capitalisation policy. DBP has adjusted the actual operating expenditure applicable to the E Factor rather than the E Factor benchmark. This is not consistent with the application of clause 15.12.
120. Consistent with the considerations set out above, the ERA has adjusted the AA5 E Factor benchmarks and actual/estimate operating expenditure amounts (Table 7.12) and has used this information to perform its own E Factor calculation, which has resulted in a negative efficiency carryover of \$37.0 million in AA6 (Table 7.13). As part of the E Factor calculation, the ERA has used the figures reported by DBP in the Regulatory Information Notice for 2024, where DBP recorded -\$0.03 million for movement in provisions in 2024; and \$7.70 million for labour cost rate update (capitalisation policy changes) in 2024.²⁸

²⁶ ERA, Access Arrangement Information for the Dampier to Bunbury Natural Gas Pipeline – 2021 to 2025, 1 April 2021 (ERA approved), p. 19 (Table 18).

²⁷ The movement in provisions are for ‘employee leave provisions’ as set out in DBP’s Regulatory Information Notice for 2024.

²⁸ DBP, 2024 Regulatory Information Notice data (figures quoted in nominal dollars).

Table 7.12: ERA draft decision adjusted AA5 E Factor benchmarks and amounts (\$ million real 2024)

	2021	2022	2023	2024	2025
Opex allowance applicable to E Factor (E Factor benchmark)					
Total opex allowance	110.6	107.4	106.4	93.6	95.6
<i>Approved adjustments:</i>					
Movement in provisions [AA5 clause 15.11(a)]	6.4	0.5	0.8	(0.0)	0.0
Capitalisation policy changes [AA5 clause 15.12]				7.7	
Adjusted total opex allowance	117.0	107.9	107.2	101.3	95.6
<u>Less</u> excludable costs: [AA5 clause 15.11(b)]					
System use gas (fuel gas)	24.5	23.5	22.1	16.5	16.0
Turbine / GEA overhauls	10.3	8.4	8.4	1.2	2.5
E Factor benchmark	82.3	76.0	76.7	83.6	77.1
Actual/estimated opex application to E Factor					
Total actual/estimated opex ^{Note1}	109.4	103.2	106.9	117.1	
<u>Less</u> excludable costs:					
System use gas (fuel gas)	26.7	25.6	25.8	24.6	
Turbine / GEA overhauls	8.0	11.0	10.0	5.3	
Actual opex for E Factor purposes	74.7	66.6	71.0	87.2	80.6

Note1: Actual/estimated opex is inclusive of the opex related to movement in provisions and capitalisation policy changes. Actual opex is listed for years 2021 to 2024. As 2025 actual expenditure is unknown at the time of this decision and consistent with AA5 clause 15.7, 2025 opex was estimated to maintain the same value of efficiency gain or loss as in 2024 which equates to a zero incremental change from 2024.

Source: ERA, Revenue Model, July 2025.

Table 7.13: ERA draft decision E Factor carryover calculation for AA6 (\$ million real 2024)

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
E Factor benchmark (A)	82.3	76.0	76.7	83.6	77.1					
Actual opex (B)	74.7	66.6	71.0	87.2	80.6					
Annual saving (C = A – B)	7.6	9.4	5.7	(3.6)	(3.5)					
Incremental saving (C _n = C _n – C _{n-1})	7.6	1.8	(3.7)	(9.2)	0.0					
E Factor carryover amounts										
Year 1		7.6	7.6	7.6	7.6	7.6				
Year 2			1.8	1.8	1.8	1.8	1.8			
Year 3				(3.7)	(3.7)	(3.7)	(3.7)	(3.7)		
Year 4					(9.2)	(9.2)	(9.2)	(9.2)	(9.2)	
Year 5						0.0	0.0	0.0	0.0	0.0
Total carryover amount (E Factor “building block”)						(3.6)	(11.2)	(13.0)	(9.2)	0.0

Source: ERA, Revenue Model, July 2025.

Required Amendment 7.3

DBP must apply a negative efficiency carryover of \$37.0 million (real as at 31 December 2024) in AA6 in accordance with the calculations set out in Table 7.12 and Table 7.13 of Draft Decision Attachment 7.

Transparency of E Factor outcome

121. To assist with transparency and to meet the requirements of rule 76(d) of the NGR, the ERA considers that the calculation of the E Factor outcome (increments/decrements) must be disclosed as a specific “building block” (line item) in the total revenue calculation.²⁹ At present, DBP’s E Factor calculation is undertaken as part of its operating cost assessment and is factored into the operating cost building block (line item). Consistent with this position, the ERA’s negative efficiency carryover of \$37.0 million has been applied to the ERA’s building block calculation of total revenue.³⁰

²⁹ Clause 15.8 of the proposed access arrangement also indicates that the E Factor calculation “will give rise to an additional ‘building block’ in the calculation of Total Revenue amounts for each year of the subsequent access arrangement period”.

³⁰ The ERA’s assessment of the other the “building block” components (return on capital base, depreciation, corporate income tax, operating expenditure) are set out in other draft decision attachments. The total revenue calculation is set out in Draft Decision Attachment 3.

E Factor for AA6

122. DBP has proposed to continue the E Factor scheme in AA6, with some amendments to the scheme's provisions in section 15 of the proposed access arrangement. These amendments include drafting changes to reflect defined terms used in the access arrangement and the removal of redundant and/or ambiguous provisions.³¹ Further to these amendments, DBP has also proposed the addition of inspections and other asset management expenditure as a specific cost that may be excluded from the E Factor when determining the E Factor benchmarks (new clause 15.9(b)(i)C).
123. The ERA considers that DBP's proposed drafting changes are amendments that can be approved on the basis that they improve the clarity of existing provisions and remove provisions that are no longer relevant. As noted by NewGen, there is a referencing error in clause 15.2(c), which DBP can address in its revised proposal in response to this draft decision.³²
124. The ERA notes that as part of its proposed drafting changes DBP has deleted the clause that sets out the E Factor benchmarks to apply for the access arrangement period (AA5 clause 15.13). In support of its decision to delete this clause, DBP submitted:

Given the E Factor benchmark is impacted by exclusions that will not be known until after the start of the access arrangement period, it is at best confusing to include figures for the E Factor benchmark which give only a partial indication of the outcome.³³

125. The ERA does not accept DBP's proposed deletion of the E Factor benchmarks from section 15 the access arrangement. Given the E Factor scheme is an operating cost efficiency scheme and operating costs are forecast as part of the building block components to determine total revenue, the E Factor benchmarks can also be sufficiently determined (forecast). While DBP's operating cost (opex) model contains all the relevant information to derive and calculate the E Factor benchmarks for AA6 (refer Table 7.6 above), it would be more transparent to include this information in the access arrangement where the provisions for the scheme are set out.

Required Amendment 7.4

DBP must amend section 15 the proposed access arrangement, which details the provisions for the E Factor scheme, to set out the E Factor benchmarks that will apply for AA6.

Operation of E Factor

126. The ERA has considered the intended operation of the E Factor in AA5 to assess whether any changes to the mechanics of the scheme are needed for AA6.

³¹ For example, replacing the words 'access arrangement period' with the defined term "Current Access Arrangement Period".

DBP identified (existing) clauses 15.4, 15.5 and 15.13 as redundant provisions.

³² Based on DBP's proposed amendments to delete other clauses, the reference to clause 15.11 should be a reference to clause 15.9.

³³ DBP, *Final Plan 2026-2030, Attachment 15.5: Submissions on Proposed AA6 Document Changes*, January 2025.

127. Due to the periodic nature of the regulatory review process and base-step-trend method of forecasting efficient operating expenditure for the next access arrangement period, the incentives to implement efficiency gains during an access arrangement period are higher at the start of the period, as DBP would get to keep the savings for longer and diminish as the period progresses. The purpose of introducing the E Factor scheme for AA5 was to provide DBP with time-neutral incentives to implement efficiency gains in each year of the access arrangement period.³⁴
128. Based on the application of the E Factor during AA5, the ERA observes that the scheme has not delivered the expected outcome; there appears to be no change to the pattern of larger operational cost savings during the earlier years of the access arrangement period. However, the E Factor scheme has only been in operation for one access arrangement period and a longer period is needed to assess and determine any long-term benefits of the scheme. For this reason, the ERA accepts DBP's proposal to continue the E Factor scheme, subject to our considerations on E Factor exclusions and further drafting changes to clarify the scheme's provisions.

E Factor exclusions

129. DBP has proposed the addition of inspections and other asset management expenditure as a cost that may be excluded from the E Factor when determining the annual E Factor benchmark (proposed new clause 15.9(b)(i)C). DBP submitted that the nature of inspections and other asset management expenditure is generally non-recurrent and can be dependent on factors outside of DBP's control of efficiency. Furthermore, when unforeseen events occur, the need for more expenditure might be required to ensure the integrity of the pipeline.³⁵
130. NewGen disagrees with DBP's proposal and reasoning. In its submission, NewGen considered that while external events may have some influence on inspections and other asset management expenditure, inspections and asset management are fundamental service provider responsibilities over which DBP can exercise significant control.
131. The ERA has considered DBP's proposed operating expenditure for AA6 in Draft Decision Attachment 5. DBP made the following submissions in relation to its proposed 'inspections and other asset management' expenditure:

Most of the forecast expenditure (almost 80%) is for station and pipeline and MLV inspections (representing allocations of \$8.7 million and \$17.0 million respectively).

Both inspection programs align with our requirements regarding Australian standards (AS 3788 and AS 2885).

We have a well-established inspection routine for pressure vessel and relief valve inspections and propose to continue this throughout the AA6 period along with the inspection and re-preservation of stored compressor bundles.

We have expanded the station inspection program to cover additional mechanical/rotational routine pressure valve and relief valve inspections. The expanded inspection regime is already yielding results in terms of identifying and addressing previously undetected risks. For example, during AA5 we detected the issue of corrosion under pipework insulation, which has subsequently driven a program of work

³⁴ ERA, *Final decision on proposed revisions to the Dampier to Bunbury Natural Gas Pipeline access arrangement 2021 to 2025*, 1 April 2021, p. 385 (paragraphs 1638-1642).

³⁵ DBP, *Final Plan 2026-2030*, January 2025, p. 120.

that has allowed us to address this corrosion issue before it escalates to a point of asset failure.

The pipeline and MLV inspections planned expenditure continues our ongoing inspection program and accounts for the inline inspections (ILI) of piggable pipeline assets which are now due. Our plan includes bringing forward the ILI of the section of Mainline South between Kwinana Junction and Wagerup West to improve our knowledge on the large number of identified defects in this area.

Overall, spending requirements for our inspection programs can vary significantly from [access arrangement] to [access arrangement] (depending on when inspections fall due) but are integral to maintaining the safety and integrity of the pipeline.³⁶

132. Based on DBP's statements, the ERA agrees with NewGen's submission that DBP's inspections and other asset management expenditure includes costs related to fundamental operations that DBP is responsible for (for example, routine pipeline asset inspections); and that these costs are within DBP's control given their routine and recurrent nature. It is noted that operating expenditure could vary between regulatory years because of inspection programs; and most of DBP's forecast expenditure for this category in AA6 is for inline inspections that are periodic and planned. If there were any significant unforeseen problems that were exposed through these inspections, then any additional operating expenditure may be considered under the other provisions of the E Factor that allow for the exclusion of:
 - Any operating expenditure not forecast but that meets the criteria for operating expenditure under NGR 91(1) and was incurred for the purpose of reducing capital expenditure (AA5 clause 15.11(c)).
 - Any other operating expenditure amount that the ERA agrees or requires DBP to exclude (AA5 clause 15.11(e)).
133. DBP has not proposed any changes to the drafting of AA5 clause 15.11 (clause 15.9 in the proposed access arrangement for AA6), other than adding inspections and other asset management expenditure as a specific excludable cost. Given DBP's retention of AA5 clauses 15.11(c) and (e) (AA6 clauses 15.9(c) and (e)), the ERA considers that any specific excludable costs can and should be limited to defined and approved cost categories. Costs that are not listed as specific excludable costs may then be considered under the other broader provisions for E Factor exclusions. For the purposes of this draft decision, the ERA considers that specific excludable costs should be limited to system use gas and turbine/GEA overhauls (which is consistent with the excludable costs that were used to determine the AA5 E Factor benchmarks).
134. The ERA further considers that the drafting of clauses 15.9 and 15.10 in the proposed access arrangement need amending to better clarify:
 - How the annual E Factor benchmarks are determined and what exclusions apply.
 - How actual/estimated operating expenditure is determined for the application of the E Factor calculation.
 - The circumstances in which the E Factor benchmark can be adjusted.
 - The E Factor benchmarks that will apply for the access arrangement period.

³⁶ DBP, *Final Plan 2026-2030*, January 2025, pp. 78-79.

135. Consistent with the ERA's considerations set out above, the ERA's draft decision is to amend section 15 the proposed access arrangement as follows (which results in new numbered clauses 15.11 and 15.12):

15 Operating Cost Efficiency Incentive Mechanism

...

- 15.9 The annual E Factor benchmark is the total annual operating expenditure forecast approved by the ERA, minus any approved cost categories ("excluded costs").
- (a) Excluded costs are limited to the following approved costs:
 - (i) system use gas; and
 - (ii) turbine / GEA overhauls.
- 15.10 The actual/estimated operating expenditure that is applicable to the E Factor calculation must apply the same excluded costs listed in clause 15.9(a).
- 15.11 The annual E Factor benchmark may be adjusted for:
- (a) movement in provisions (for example, employee leave provisions);
 - (b) any operating expenditure amount not included in the ERA approved operating expenditure forecast, but that meets the requirements of Rule 91(1) and was incurred for the purpose of reducing capital expenditure;
 - (c) operating expenditure arising from an approved cost pass through event which applies in respect of that year;
 - (d) capitalisation policy changes that result when the Operator changes its approach to classifying costs as either capital or operating expenditure during the access arrangement period;
 - (e) any operating expenditure amount that the ERA agrees or requires the Operator to exclude from the E Factor benchmark.
- 15.12 The E Factor benchmarks, determined in accordance with clause 15.9, for the access arrangement period are set out in the following table.

E Factor benchmarks for the access arrangement period commencing 1 January 2026 (\$ million real 2024)

[Table to be inserted by DBP]

Required Amendment 7.5

DBP must amend clauses 15.9 and 15.10 of the proposed access arrangement, which detail the exclusions and adjustments that apply to the annual E Factor benchmark, to be consistent with the revised drafting set out in paragraph 135 of Draft Decision Attachment 7.

E Factor benchmarks

136. E factor benchmarks are required to be established for the incentive scheme to operate. Under the provisions for the scheme (as amended by this draft decision), the E Factor benchmark for the relevant regulatory year is the annual operating expenditure forecast minus E Factor “excluded costs”. Consistent with the ERA’s draft decision on E Factor exclusions above, the E Factor excluded costs for AA6 are limited to system use gas and turbine/GEA overhauls expenditure.
137. The ERA has assessed DBP’s forecast operating costs for AA6 in Draft Decision Attachment 5. This forecast of operating costs has been used to calculate the E Factor benchmarks to apply for AA6. As per the provisions of the E Factor scheme as determined by this draft decision the operating cost allowance used to calculate the E Factor benchmarks may be adjusted for:
- Movement in provisions (for example, employee leave provisions).
 - Additional conforming operating expenditure that was incurred for the purpose of reducing capital expenditure.
 - An approved cost pass through event which applies in respect of that year.
 - Capitalisation policy changes.
 - Any other operating expenditure amount that the ERA agrees or requires to be excluded.
138. The E Factor benchmarks for AA6, calculated as part of this draft decision, are set out in Table 7.14.

Table 7.14: ERA draft decision E Factor benchmarks for AA6 (\$ million real 2024)

	2026	2027	2028	2029	2030
Total forecast opex ^{Note1}	105.8	110.9	108.9	103.5	106.0
<i>Less excluded cost categories:</i>					
System use gas	22.7	20.4	19.1	17.3	18.0
GEA/turbine overhauls	4.9	5.6	4.5	6.9	7.8
E Factor benchmark	78.20	84.90	85.30	79.30	80.20

Note1: Adjustments to total forecast opex are provided for under clause 15.11 of the proposed access arrangement approved by this draft decision.

Source: ERA, Revenue Model, July 2025.

Required Amendment 7.6

DBP must update the E Factor benchmarks to apply for AA6 to reflect the benchmarks set out in Table 7.14 of Draft Decision Attachment 7. The E Factor benchmarks must be set out in the access arrangement.

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